

# Upstream Dialogue

## Stewardship

Sub-zero temperatures can make work far more challenging and the potential for workplace injuries can increase. Chevron has developed a program that helps keep employees safe on the job. [read more](#)

## Inside this issue:

Industry in the News [read more](#)

### Stewardship

Learn about Chevron Canada Resources' Zero is Attainable program. [read more](#)

### Employee Perspectives

Arthur "Buddy" Dupuis, Environmental Specialist, is never bored at work. His primary job is to manage, evaluate and improve the systems that deter birds from landing on the tailings pond at Shell Canada's Muskeg River mine... he also gets to interact with the Fuzzies. [read more](#)

### Innovation and Technology

Learn about the way Canadian Natural Resources Ltd. is using Carbon Capture and Storage innovation. [read more](#)

Industry Practice and Regulations [read more](#)

### CAPP EVENTS & UPDATES

#### Stewardship Dinner May 26, 2009

Tickets for the 2009 Stewardship Dinner are now on sale. Purchase your tables or individual tickets.

#### Investment Symposium June 15 - 17, 2009

Registration for the 20th Annual CAPP Oil and Gas Investment Symposium is now open.



## Tom Huffaker joins CAPP

March 30, 2009 - CAPP is pleased to announce that Tom Huffaker, former U.S. Consul General for Alberta, Saskatchewan and the Northwest Territories, has been named Vice-President, Policy and Environment.

The new position will focus on strategic policy development in a wide range of areas, including climate change, environment, federal regulatory reform, fiscal matters, safety and environmental stewardship and aboriginal affairs.

- ▶ Read the [CAPP news release](#)
- ▶ Read Calgary Herald article [New CAPP boss brings insight into U.S.](#)

### Industry in the News

## CAPP President Speaks on Economic Recovery

March 17, 2009 - David Collyer spoke to a sold-out audience at the Calgary Chamber of Commerce. His presentation was entitled *Economic Recovery: A Leadership Role for Canada's Oil and Gas Sector*.

The speech highlighted the role of the oil and gas industry in leading Canada out of recession, noting that global energy demand is projected to increase significantly. Forecasts suggest a 50 per cent increase by 2030 and a doubling by 2050 - driven by population growth and aspirations for higher standards of living in the developing world.

Collyer identified specific challenges facing the industry today, including the importance of active engagement in North American climate change policy development. The call to action is to ensure industry interests are represented in Canadian, bilateral Canada/ U.S., and international policy frameworks.

- ▶ Read the [speech summary](#) and provide your feedback
- ▶ Read Dave Collyer's full speech [Economic Recovery: A Leadership Role for Canada's Oil and Gas Sector](#)

## "Our Casino Economy"

March 27, 2009 - An article was released in the Ottawa Citizen that describes the resentment that Western Canada still has as a result of the 1980 National Energy Program. Columnist Susan Riley argues that this hampers the development of a new energy policy and goes on to describe the oil sands as having "horrendous environmental impact." She indicates that the emphasis of our current National Energy Strategy should focus on the environment and energy security.

Industry believes that the focus of a national energy strategy should be balanced, focusing on energy security, the environment, and developing a strong economy for all Canadians.

- ▶ Read Ottawa Citizen article ["Our Casino Economy"](#)
- ▶ Read CAPP's [response letter](#) to the article (printed in the Ottawa Citizen and the Edmonton Journal)


## California Adopts Low Carbon Fuel Standard

April 23, 2009 - The California Environmental Protection Agency announced the implementation of a low carbon fuel standard. The regulation could mean that Canadian oil companies may be required to pay a U.S. tax on greenhouse gas emissions from oil imported into California. Canada only supplies two per cent of California's oil, however, there is a concern that the standard could be adopted by other U. S. states that import Canadian oil.

Industry maintains that all fuel sources should be allowed to compete in the market on an equitable basis and that Canadian oil sands crude compares favourably with many other oils that California currently uses.

- ▶ Read CAPP's [response](#) to the low carbon fuel standard decision
- ▶ Read the California Environmental Protection Agency [news release](#)





(from left to right) Rob Ryan, Project Manager for CGG Veritas and Daglinn Tromborg, Equilibria Colours Coach, discuss operational plans with Chevron Canada's Kevin Williams during the 2008 appraisal program at Ells River.



### Energy in Action

May 4 - May 29, 2009

Energy in Action (EIA) is hitting the road again for the sixth straight year.

This year, 35 CAPP member companies will take EIA to 11 communities in Alberta, Saskatchewan, British Columbia, Nova Scotia, and Newfoundland and Labrador. The EIA team will deliver stewardship related educational programs and environmental renewal activities to grade 4, 5 and 6 students at elementary schools in each of these communities.

Learn more about **Energy in Action** and how your company can get involved.



2008 Steward of Excellence Award recipient  
Health & Safety Performance

### Stewardship

## Chevron: "Zero is Attainable"

The 2006-07 season marked Chevron Canada Resources' first winter of operations at its Ells River insitu oil sands project. During that first season Chevron recorded five injuries, far more than the company considered acceptable.

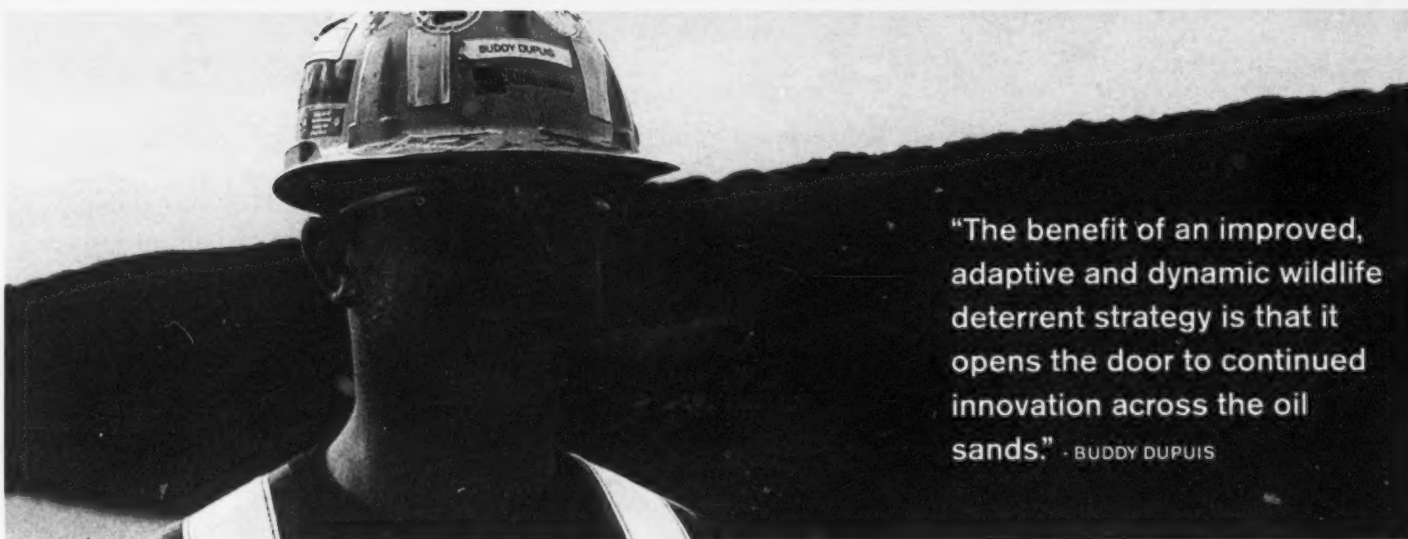
In response, the Zero is Attainable initiative was launched. The objective was to significantly reduce workplace injuries during the 2007-08 winter season. To add to the challenge, the second season of work on the site was considered much more complex.

The program involved providing more health, environment, and safety support on site, providing opportunities for less experienced supervisors to gain experience, and enhancing management's active presence on-site.

The results of the Zero is Attainable program for the 07/08 season were dramatic. The total recordable incident rate declined by 60 per cent and the number of injuries recorded went from five to three. No employees had to miss work as a result of their injuries.

Watch a video to learn more about the Zero is Attainable program.





"The benefit of an improved, adaptive and dynamic wildlife deterrent strategy is that it opens the door to continued innovation across the oil sands." - BUDDY DUPUIS

## Employee Perspectives

# Protecting 'feathers and fuzzies'

**Name:** Arthur "Buddy" Dupuis  
**Title:** Environmental Specialist - Wildlife  
**Company:** Shell Canada  
**Years of Experience:** Three  
**Location:** Fort McMurray, Alberta  
**Best part of the job:** "Since day one, I have never been bored."  
**Success story:** Taking the lead in improving the industry's wildlife deterrent strategies.

Tailings ponds are necessary for recycling approximately 80 per cent of the water used in the oil sands production process rather than continuously drawing it from its original source. However, these ponds can also be harmful to wildlife.

Buddy Dupuis doesn't see a Catch 22. He sees an opportunity for innovation.

As a wildlife specialist, Buddy is responsible for managing, evaluating, and improving the systems that keep birds and other wild animals away from harm at Shell's Muskeg River Mine. It is a complex job, considering the natural lure that large water bodies like tailings ponds can have on these creatures. Buddy has two critical tools at his disposal – an innovative technology called the BirdAvert™ system, and a strong personal commitment

to making change and improvements in the industry.

BirdAvert™ is an 'on-demand' system that uses radar to track approaching birds. When a bird is detected near a tailings pond, a radio signal activates several deterrents, including cannon sounds, a strobe light, scarecrows, and a mechanical model of a falcon that flaps its wings and screams attack cries, simulating a predator, which all create a highly effective scare tactic.

The system is an advance over traditional deterrent methods that typically involve firing cannons randomly over a given time interval. The problem with those systems is that they may not fire when the birds are present, and over time the birds learn that they are not something to fear. BirdAvert™ also helps Shell fulfill a noise reduction commitment to the nearby community of Fort McKay since the deterrents fire significantly less often than those on random timers.

Buddy uses the system software to track all information in a database, including what the radar is tracking flying over the pond. This allows Shell to present an open book to regulatory inspectors.

Buddy is committed to implementing change and improvement across the industry. He is the Chair of the Regional Aquatics Monitoring Program (Fisheries Subgroup), the Oil Sands Bird & Wildlife Protection Committee, the CEMA – RWG – Biodiversity and Wildlife Subgroup and the CONRAD Wildlife Habitat Effectiveness and Corridor Steering Committee. "The only way to significantly make change in the world is to be the change you want to see," says Buddy.

So where do the fuzzies come in? Another part of Buddy's job is to keep the animals he refers to as "the fuzzies" away from operations. Whether he is scaring away black bears and coyotes that wander on site, educating employees about maintaining site hygiene and waste practices (to limit the "rewards" that attract animals), or even safely relocating a family of foxes that took up residence in a pipe near the pond, Buddy has many "fuzzy stories" to back up his claim to never being bored on the job.

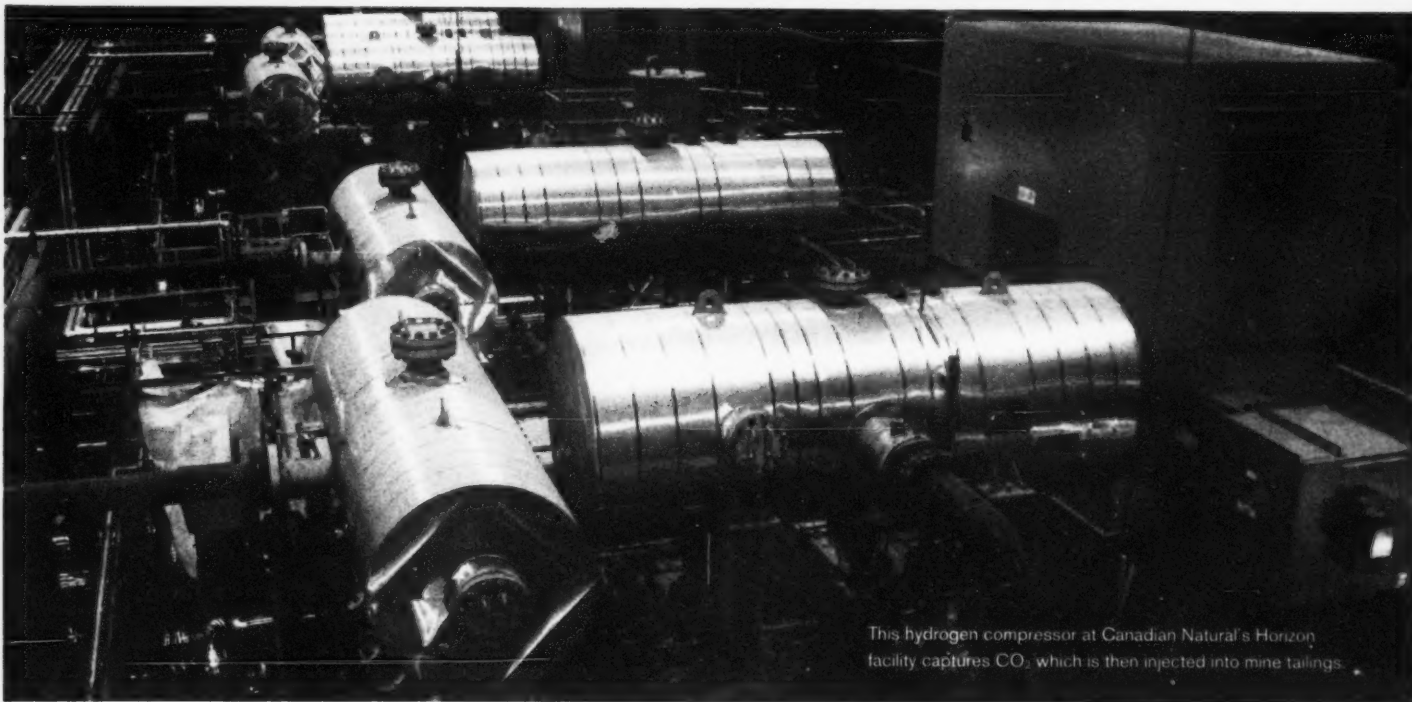
Watch a video to learn more about the BirdAvert™ System



- ▶ Read a study that reviews the effectiveness of the BirdAvert™ system - [Journal of Applied Ecology](#)







This hydrogen compressor at Canadian Natural's Horizon facility captures CO<sub>2</sub> which is then injected into mine tailings.

## Innovation and Technology

# Exploring CO<sub>2</sub> Potential

Carbon capture and sequestration or storage (CCS) is an innovation that has potential to help reduce our industry's green house gas emissions. CCS is not exclusive to the oil and gas industry or to Alberta's oil sands and is being used in different ways by several companies. Further, more analysis will be needed and investment and research are required to determine its full potential in a range of applications.

One of the companies leading the way in CCS research is Canadian Natural Resources Limited (Canadian Natural). Canadian Natural is using CCS innovation to manage tailings [► sidebar], improve water recycling efficiency and accelerate the process of reclamation at its Horizon Oil Sands facility, 70 kilometers north of Fort McMurray. The Horizon facility includes a surface mining and bitumen extraction plant with on-site bitumen upgrading and associated infrastructure to produce synthetic crude oil.

Canadian Natural is testing the benefits of injecting CO<sub>2</sub> into mine tailings. Studies indicate that using CO<sub>2</sub> to separate the water from the solids in tailings is more effective than conventional methods of treatment such as adding gypsum. Solids must be entirely settled before the water can be re-used. Speeding up this process means that more water can be recycled back into the mining process rather than drawing it from the river system.

In addition, all or most of the CO<sub>2</sub> used is chemically altered and remains stored in the tailings rather than being emitted into the atmosphere. These tailings are subsequently reclaimed as part of standard mine reclamation. Canadian Natural expects this process of sequestering CO<sub>2</sub> into tailings will eliminate about 180,000 tonnes of CO<sub>2</sub> emissions every year while significantly reducing the amount of fresh water required.

► **Learn** more about different methods of carbon capture and storage that CAPP member companies are using.

## ► Tailings

In open-pit mining, companies use hot water to separate very heavy oil (bitumen) from the sticky sand. This water is then sent to a tailings pond – often a discontinued mine pit. The tailings are a mixture of water, clay, sand and residual bitumen. Tailings ponds allow the water to be recycled in the mining operation.

**Learn** More about Tailings Ponds

# 0.1%

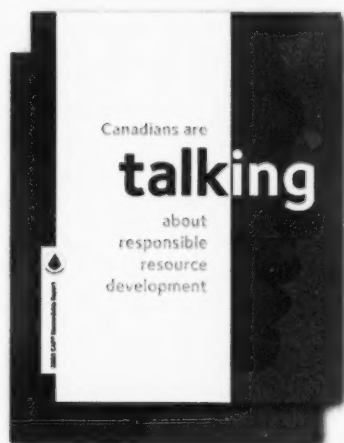
Percentage of the world's total greenhouse gas emissions generated by oil sands development.





Industry Practice and Regulations

## Stewardship Report & Benchmarking Guide



CAPP's 2008 Stewardship Report and 2009 Benchmarking Guide are now available.

CAPP's Stewardship Report represents an annual record of our industry's progress toward reducing its environmental footprint, protecting our employees and contractors from harm, and contributing to healthy, vibrant communities. In 2008 we saw improvement in some areas; and a need to increase our efforts to achieve our goals in other areas.

The Benchmarking Guide is intended to provide CAPP members with a standardized approach to preparing and submitting their 2008 reporting year benchmarking data in an efficient and consistent way. The methodologies (practices, procedures and rules) and examples in the guide assist companies in collecting and analyzing the data behind each measure.

- ▶ Review the [2008 Stewardship Report](#)
- ▶ Review the [2009 Benchmarking Guide](#)

## 2009 CAPP Board of Governors

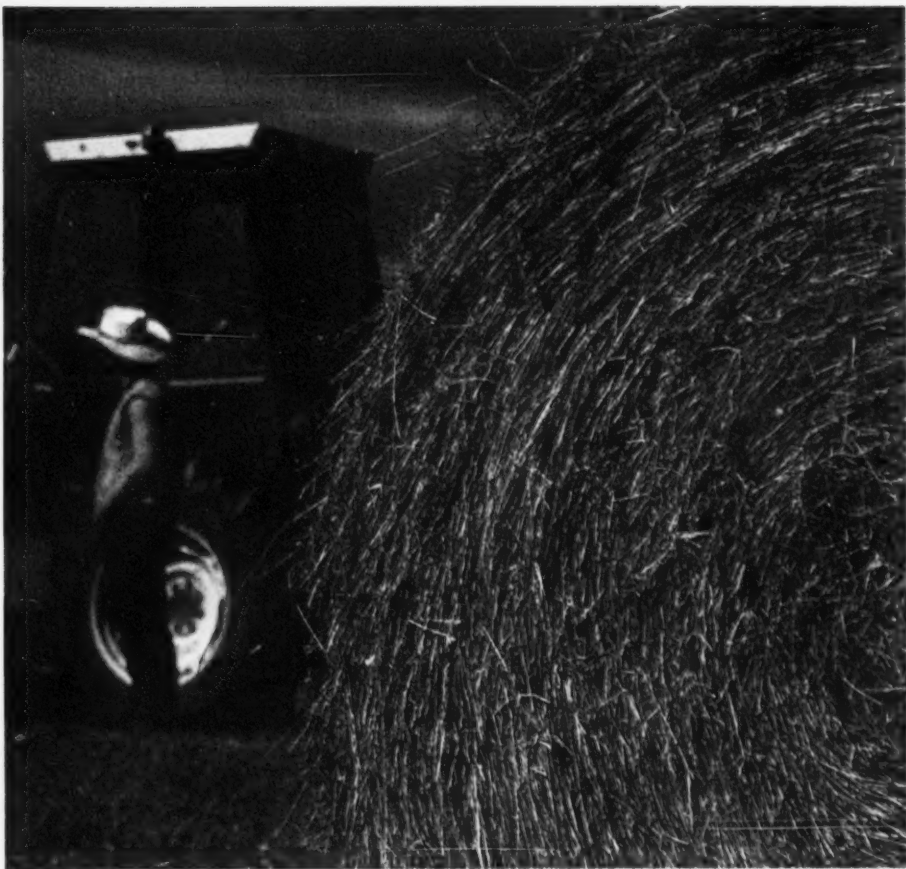
CAPP elected its 2009 Board of Governors at its Annual General Meeting on April 1, 2009. Andrew Wiswell, President and CEO, NAL Oil and Gas Trust, is the CAPP 2009 Chair. Chris Seasons, President, Devon Canada Corporation, is the Vice-Chair.

- ▶ View the full [2009 CAPP Board of Governors list](#)



**CAPP** CANADIAN ASSOCIATION  
OF PETROLEUM PRODUCERS





#### Industry Practice and Regulations (continued)

## Community-based initiatives announced in British Columbia

On March 19, 2009 the Government of British Columbia announced new initiatives in several areas, including those identified in the BC Energy Plan. The community-based initiatives were created to enhance community life and improve relations between landowners and industry in the northeastern part of the province.

Community-based initiatives include a commitment to accelerate the BC Energy Plan goal of eliminating routine flaring by 2016, and a "good neighbour" initiative in partnership with industry focusing on

developing best practices for addressing community concerns.

Landowner-based initiatives include establishing an independent farmer's advocate position; creating a land agent code of conduct and new licensing requirements; implementing a standard surface lease agreement; and, reviewing an enhanced role for the Mediation and Arbitration Board to further improve processes for landowners.

CAPP will participate in the development of these initiatives. Resourcing and timetables will be determined in the next few months.

- Read the Government of British Columbia [news release](#)

## Changes to Alberta's Research and Development system

Over the past year, the Alberta Government has been meeting frequently with stakeholders, including CAPP, for advice on the development of a provincially aligned research system. The goal is to create a system in which research activities contribute effectively to the system as a whole, which in turn is integral in developing Alberta's knowledge based economy.

As part of the process, Alberta Advanced Education and Technology introduced The Alberta Research and Innovation Act (Bill 27) which outlines legislative changes to Alberta's research and innovation system.

The proposed framework would see 10 existing science and research-based organizations merging into five new entities: an advisory body and four board-governed, provincial corporations. These new corporations would focus on bioindustries (i.e. agriculture, forestry, life sciences), energy and the environment, health, and bringing technology to market.

The Alberta Government says the changes will help the system become stronger and more efficient and is part of the commitment to building long-term prosperity in Alberta.

- Read more about the new [research and development framework](#)
- Read the AB Government [news release](#) announcing Bill 27





## Provincial Budget Highlights

Canada's provinces have completed their 2009 budget announcements. The primary focus across the country is on addressing the economic meltdown. Although most budget measures are not directly focused on the oil and gas industry, several announcements could affect industry.

### Harmonizing sales tax

Companies doing business in Ontario will pay less tax, benefiting from Ontario's decision to harmonize provincial sales tax (PST) with the goods and services tax (GST). The harmonized tax (HST) will produce an **input tax credit** for business. This makes the tax a pass-through for business, making it a true value-added tax (VAT).

CAPP continues to engage with the British Columbia and Saskatchewan governments in support of harmonizing taxes in each province. The Atlantic provinces have had an HST for several years.

### Royalties

The British Columbia budget included minor modifications to select royalty programs including changes to its deep drilling programs and net profits interest (NPI) royalty. Despite not being part of budget announcements, the Alberta Government has been adding royalty regime incentives designed to encourage more drilling activity.

### Research and Development

Several budgets included research and development incentives. Saskatchewan announced that it is converting the non-refundable research and development tax credit (15 per cent), to a refundable tax credit. The program is aimed at

encouraging research and development for small to mid-sized companies and complements Alberta's scientific research and experimental development tax credit announced in their 2008 budget.

The Newfoundland and Labrador government announced \$59 million in tax credits that include research and development. The government also committed \$25 million to the Newfoundland and Labrador Research and Development council, which is developing and implementing the province's R & D strategy.

### Education property taxes

Some businesses will also see relief with changes announced to education property taxes. British Columbia is introducing a tax credit for school taxes paid by businesses. Saskatchewan business will see a reduction in property taxes as the province limits the amount of education funding raised through this method. The Alberta budget did not include any modifications

on property tax. However, the CAPP Property Tax committee continues to engage with Alberta Municipal Affairs on this issue.

CAPP will work closely with member representatives to put together a proposal for 2010 federal pre-budget consultations. Consultations will occur in September and October.

### Access the budgets:

- ▶ [British Columbia](#)
- ▶ [Alberta](#)
- ▶ [Saskatchewan](#)
- ▶ [Manitoba](#)
- ▶ [Ontario](#)
- ▶ [Quebec](#)
- ▶ [Nova Scotia](#)
- ▶ [New Brunswick](#)
- ▶ [PEI](#)
- ▶ [Newfoundland and Labrador](#)
- ▶ [Yukon](#)
- ▶ [Northwest Territories](#)
- ▶ [Nunavut](#)

## MYTH vs FACT



### THE TWO-JAWED FISH

**MYTH:** In April 2008, residents in a northern Alberta community were alarmed at the find of an odd goldeye fish. The fish was caught from Lake Athabasca

and it appeared to have two mouths. There was some concern that the "mutated" fish was evidence that nearby industry operations were polluting the water.

**FACT:** A scientist who studied the two-jawed fish announced his findings in March 2009. Joe Nelson, a biology professor from the University of Alberta, said that the fish's "second mouth" was not a mutation. In fact, the fish's tongue had been deflected down through the jaw which can sometimes happen when a fish dies. Goldeye fish have teeth on their tongues, which created the appearance of a second mouth.

- ▶ Read Globe and Mail article "[Unusual northern Alberta fish didn't have two mouths, scientist finds](#)"





The Canadian Association of Petroleum Producers (CAPP) represents 130 companies that explore for, develop and produce natural gas, natural gas liquids, crude oil, oil sands, and elemental sulphur throughout Canada. CAPP member companies produce more than 90 per cent of Canada's natural gas and crude oil. CAPP also has 150 associate members that provide a wide range of services that support the upstream crude oil and natural gas industry. Together, these members and associate members are an important part of a \$120-billion-a-year national industry that affects the livelihoods of more than half a million Canadians.

2100, 350 - 7 Avenue SW  
Calgary, Alberta  
Canada T2P 3N9  
Telephone: 403.267.1100  
Fax: 403.261.4622

403, 235 Water Street  
St. John's, Newfoundland and Labrador  
Canada A1C 1B6  
Telephone: 709.724.4200  
Fax: 709.724.4225

If you would like to receive this newsletter directly from CAPP, email your request to [communication@capp.ca](mailto:communication@capp.ca).



#### PUBLICATION OPPORTUNITY

We are looking for employee stories to publish in our Employee Perspectives section.

If you know of a CAPP member company employee who has taken a leading role in an innovative company project, they may be eligible for feature in Upstream Dialogue. Please submit a brief bio, any existing published stories, and appropriate contact details about the employee to [communication@capp.ca](mailto:communication@capp.ca).

#### FEEDBACK

Your feedback, questions and/or comments are always welcome. Your input is important as we work to provide you with information about Canada's oil and gas industry.

► Send us your feedback

